TABLE 8 – TAXI (CNG)

WHY CONVERT TAXICABS TO NATURAL GAS?

Why taxicabs?

- Taxis are operated on a 24-hour basis, and often run non-stop.
- The average gasoline consumption is 40 gallons per day for each taxicab on the road.
- The highest concentration of taxicabs are found in highly congested metropolitan areas, and rarely venture outside a thirty mile radius of their base of operations.
- By the nature of city traffic, vehicles are often operating at idle speed. As we know, motoring at idle speed produces the greatest amount of pollution.
- At over 100,000 miles per year, taxicabs generally suffer extremely heavy motor wear, and as a regular gasoline engine deteriorates with heavy use it produces more pollution.
- Taxicabs provide transportation to millions of people in the U.S. each day, and as such can demonstrate to the general public that alternative fuel vehicles are a viable alternative to high emission, gas-guzzling vehicles.

Given these facts, it is evident that alternative fuel taxicabs can play an important role in reducing mobile source emission and generating a wider public understanding of alternative fuel vehicles.

Alternative Fuel Choices

Taxicabs today do not have a wide variety of practical fuels from which to choose.

- At this time, there are no electric vehicles that could be used in this application.
- There are no propane certified vehicles available at this time.
- The only viable alternative at this time is a natural gas vehicle.

Some Problems a Taxicab Company May Face When Converting to Natural Gas

- Infrastructure – The availability of refueling stations is critical to the operation of a taxicab. Today, there are few natural gas refueling stations, and most of these are not accessible on a 24-hour basis, as would be needed in a taxicab application. However, since taxicabs often operate in a small radius, one local 24-hour station can support a fleet. Taxi fleets need to compile a list of all public and private natural gas stations in the area, and make arrangements with these stations since many are not open to the public. As the use of alternative fuel vehicles expands, it is critical for fleets to develop a relationship with the local natural gas company, and work together for accessible refueling.
- Cost – Today's Natural Gas Vehicles are more expensive than regular gasoline vehicles by a substantial amount. Since a taxicab has usually a limited life expectancy of 3 years, the incremental cost is a financial deterrent for fleets to convert to natural gas. It is important that government and auto manufacturers help fleets fund that incremental cost. Financing is also an issue. Natural Gas Vehicles are a new product, and as such no residual value is provided for this type of vehicle yet. For a bank, this is basically a non-collateral loan; and for the fleet owner, a high interest loan. Presently, there are no auto manufacturers that offer a lease on this type of vehicle.

- Other Costs to Consider –
  - Training and maintenance personnel
  - Modifications to be made to the fleet repair facility in order to comply with local ordinances
  - On-site refueling station
  - A chase vehicle to rescue ngv's that run out of fuel

Choice of Vehicle

In choosing the right vehicle for use as a Natural Gas Taxicab, the basic requirements are four doors, ample baggage capacity, and a 200-mile range.

The choices available today to meet those requirements are still very limited. In our opinion, there are only two types of vehicle that are suited for taxicab use at this time, Ford Crown Victoria and Honda Civic. Each has its advantages and drawbacks. The major drawback of both vehicles is the limited trunk space.

- The Ford Crown Victoria is a more spacious vehicle and can comfortable carry four passengers. It has slightly larger trunk space than the Honda Civic, but has a limited range of 130 miles.
- The Honda Civic can carry only three passengers, has less trunk space than the Ford, but has a longer range of 200 miles. It also consumes less fuel and emits less emissions than the Crown Victoria.
- The ideal vehicle for taxicab operations would be a Natural Gas Minivan with ample space for passengers and baggage.

One more thought to consider when choosing the vehicle is the proximity of the dealer to the fleet's base of operations.

Benefits of Natural Gas Taxicabs

Besides the obvious benefit of cleaner air,

- As Natural Gas is a cleaner fuel, there is less wear on the engine, extending the life of the motor. The life of the motor oil is extended, and there is less maintenance on the engine.
- Reduced cost of fuel
- Good will from the public. The response from the population in our area, customers and non-customers, has been great. The recognition of ngv taxicabs and their benefit to the environment can be a good marketing tool for companies.
- One of the most unexpected benefits has been that our drivers report that they breathe easier and get less headaches since driving ngv taxicabs. One driver no longer has a migraine headache by the end of his shift. In fact, all the drivers of our ngv fleet have a more positive attitude about their jobs and are always willing to share their positive ngv experience with their passengers.